## Message

From: Garcia, Sam [Garcia.Sam@epa.gov]

Sent: 12/15/2011 4:38:43 PM

To: Paula Schmittdiel [Schmittdiel.PaulaLNDU@usepa.onmicrosoft.com]

CC: Wharton, Steve [Wharton.Steve@epa.gov]; Sisk, Richard [Sisk.Richard@epa.gov]; Schmidt, Andrew

[Schmidt.Andrew@epa.gov]

Subject: Fw: VB I-70 OU2 Scope of Work Items

## Hi Paula,

Below are Andrew's comments after his review of the groundwater monitoring reports I recently gave you. Based on Andrew's comments, I will finalize the SOW with PWT and inform the City and County of Denver. In addition, according to the AOC between Denver and EPA, EPA must notify, via a letter, if there is a change in the OU 2 EPA project manager. I'm in the process of preparing that letter.

Thanks,

Sam Garcia EPA Remedial Project Manager 303-312-6247 (work) 303-808-9778 (cell) garcia.sam@epa.gov

--- Forwarded by Sam Garcia/R8/USEPA/US on 12/15/2011 09:26 AM ----

From: Andrew Schmidt/R8/USEPA/US
To: Sam Garcia/R8/USEPA/US@EPA

Co: Andrew Schmidt <schmidt.andrew@epa.gov>

Date: 12/14/2011 03:35 PM

Subject: Fw: VB I-70 OU2 Scope of Work Items

## Hi Sam,

I took a look at the reports you provided me. I don't have the reports in front of me at the moment (and couldn't find them in your office), so you'll have to double check that my memory is correct. The applicability of information provided in the reports to the scoping items I originally emailed you is provided below on a numbered basis:

- 1) Quarterly potentiometric maps should be created based on historical data to determine groundwater flow direction, and seasonal variations to groundwater flow. The quarterly groundwater monitoring reports did present potentiometric maps, however, the maps were tied to an artificial or incorrect surveyed elevation, so the groundwater elevations are relative. If we had a year or two of depth to groundwater data and proper survey data, we could determine groundwater flow direction and seasonal variation using historical data.
- 2) The validity of Platte River surface water sampling locations N43 and N46 should be assessed using current and historical groundwater potentiometric maps. Using information gleaned from item #1, we could determine the validity of N43 and N46.
- 3) Monitoring wells MW-1 through MW-6 should be properly developed. No information was provided to indicate that monitoring wells MW-1 through MW-6 were properly developed.
- 4) Monitoring wells MW-1 through MW-6 should be gauged for separate phase product, and sampled for VOCs, SVOCs, and metals for four consecutive quarters. The quarterly groundwater reports indicated that interface probes were used to measure depth to water and depth to product. No product was indicated, although I do recall an oily substance being noted in a field sampling log for one monitoring well. Groundwater samples collected during previous sampling events were not analyzed for VOCs or SVOCs.
- 5) New quarterly potentiometric maps, and plume maps (if applicable), should be generated using data from the groundwater sampling. *Not applicable, would be conducted under the new SOW.*
- 6) Concentrations of metals, VOCs and SVOCs in soil collected during the RI should be compared to values presented in the Regional Screening Level (RSL) Soil to Groundwater Supporting Table (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\_table/Generic\_Tables/pdf/soil2gw\_sl\_table\_ru n\_JUN2011.pdf) No soil data was discussed in the reports.

In summary, although there is some relative groundwater elevation data, and potentiometric maps were created, items #3 and #4 were not addressed and technically items #1 and #2 have not been fully addressed due to poor survey data. During routing groundwater monitoring it is standard practice to measure depth to water, depth to product and total depth of the well. As a result, I'm not sure changing the SOW is warranted. Yes, it will add a little cost to create new groundwater potentiometric maps, but it is standard practice to report groundwater elevation data that is temporally consistent with groundwater analytical data, and the groundwater elevation data should be reported with accurate elevation data (which has not been done to date, and would require new maps anyway).

Hopefully this email provides you with the necessary direction. If you need additional information or clarification, please do not hesitate to contact me.

Thank you,

Andrew

Andrew P. Schmidt, P.G. Regional Superfund Hydrogeologist US EPA Region 8, 8EPR-PS 1595 Wynkoop Street Denver, CO 80202-1129 303.312.6283 (office) 303.312.7151 (fax)

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---- Forwarded by Andrew Schmidt/R8/USEPA/US on 12/14/2011 03:08 PM ----

From: Andrew Schmidt/R8/USEPA/US
To: Sam Garcia/R8/USEPA/US@EPA

Cc: Andrew Schmidt <schmidt.andrew@epa.gov>

Date: 07/12/2011 10:09 AM

Subject: VB I-70 OU2 Scope of Work Items

Hi Sam,

As requested, I have put together a list of items that we would request a contractor to complete. If you have any questions or concerns, please don't hesitate to contact me.

- 1)
- 2) Quarterly potentiometric maps should be created based on historical data to determine groundwater flow direction, and seasonal variations to groundwater flow.
- The validity of Platte River surface water sampling locations N43 and N46 should be assessed using current and historical groundwater potentiometric maps.
- 4) Monitoring wells MW-1 through MW-6 should be properly developed.
- 5) Monitoring wells MW-1 through MW-6 should be gauged for separate phase product, and sampled for VOCs, SVOCs, and metals for four consecutive quarters.
- 6) New quarterly potentiometric maps, and plume maps (if applicable), should be generated using data from the groundwater sampling.
- 7) Concentrations of metals, VOCs and SVOCs in soil collected during the RI should be compared to values presented in the Regional Screening Level (RSL) Soil to Groundwater Supporting Table (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\_table/Generic\_Tables/pdf/soil2gw\_sl\_table\_ru n\_JUN2011.pdf)

I think this matches our data requests to CCoD. If VOCs or SVOCs (or NAPLs) are detected at concentrations above MCLs or RSLs then additional work tasks would likely be needed.

Thank you!	
Andrew	
Andrew P. Schmidt	PG

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